



# CIO-led AI transformation

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Embrace your role and take the lead on  
this enterprise technology journey



**Unless you're the anomaly, artificial intelligence (AI) is fast becoming the leading disruptive force in your enterprise. Two out of every three organizations plan to allocate at least five percent of their budget to generative AI (genAI) initiatives.<sup>1</sup> Fifty-five percent of enterprises will deploy genAI in some fashion over the next 24 months. And for the majority of organizations, the Chief Information Officer (CIO) will control that spending.<sup>2</sup>**

AI solutions can be used for many different applications and in a variety of forms, from off-the-shelf enterprise productivity tools to tailor-made solutions. The scope and diversity of use cases contributes to the pressure CIOs are feeling from all directions. Front-line managers are looking for solutions to workforce planning issues and see immediate opportunities for implementation. Peers are trying to understand its financial impact or how it can be best leveraged to accomplish strategic goals. The CEO and board are demanding answers to how it can or will change the business and competitive landscape.

CIOs are ideally suited and well positioned for the challenge. They understand the complex interplay of technologies involved. They can see the big picture across the enterprise and how AI fits into its overall modernization and transformation strategies.

CIOs have also been battle hardened by other recent transformations, including cloud migrations, data and analytics initiatives, and robotic process automation. Lessons from these carry over and are just as applicable here. CIOs have learned that:

- One-size-fits-all approaches don't work.
- Technology strategy must be sound from the start.

- Return on investment (ROI) and business value must drive decisions.
- Human challenges will be harder to solve than technology challenges.
- The exponential value of AI is unlocked only by seamless access to data.
- Technical debt is often a bigger drag on initiatives than anyone first realized.
- Governance is essential.

...The list goes on.

If technologies such as software as a service (SaaS) have been challenging the influence of the CIO, then AI has certainly put an end to that thinking. To seize the opportunity, however, CIOs must assert control, and that requires both a plan and the ability to execute it.

In this article, we look at the three pivotal roles CIOs can and should play to lead their organizations smoothly and successfully through the incredible transformation AI promises.

<sup>1</sup> Source: IDC, "Worldwide AI and Generative AI Spending Guide" (April 2024)

<sup>2</sup> Source: Gartner, "Gartner Annual Survey of CIOs and Technology Executives" (October 2023)





## PIVOTAL ROLE 2:

# Build the AI Foundation

**Sustained success requires an AI-ready enterprise. CIOs must close key gaps to enable responsible enterprise-wide AI adoption across applications, data, cloud, and cyber.**

### There are four key steps:

- **Enable access to leading AI solutions.** To avoid the chaos of competing or misaligned strategies, the cost of uncoordinated or duplicate efforts, the risks associated with ungoverned AI, and the inability to fully realize synergies, CIOs must own the investment and decision-making in securing trusted access to leading AI solutions and models for the business.
- **Build the data foundation.** Data is the fuel of AI, so it's essential to ensure you have the required foundation for data infrastructure, governance, and support for technologies such as retrieval augmented generation (RAG) and large language models (LLMs). Data is often scattered across the enterprise—and outside, too—which can make AI implementations difficult and time-consuming, and rob them of effectiveness. There's often a pervasive lack of data quality, a lack of trust in data, and low data literacy that must be addressed.
- **Scale cloud solutions.** CIOs are best suited to identify the applications and data that must be in the cloud to maximize the future potential of AI, ensuring its scalability, flexibility, and efficiency. In many cases, you must rethink or accelerate cloud migration efforts as AI impacts priorities.
- **Upskill for AI.** CIOs are recognizing that AI tools require specific expertise. They must cultivate teams of IT subject matter experts, data scientists, and AI architects. CIOs must also support the transformation of the operating model to enable LLM operations and management.

## PIVOTAL ROLE 3:

# Co-shape the enterprise AI transformation

**CIOs must collaborate to effectively steward enterprise AI strategy through investments, technology decisions, and adoption.**

### Responsibilities include:

- **Outline the architectural framework.** CIOs must create the foundational architectural framework for AI technology, ensure it's adaptable to accommodate major disruptions in the future, and guide enterprise AI decisions and standards. They will have to manage the pace of change and set board-level expectations.
- **Implement trusted AI.** CIOs must work with chief risk officers (CROs) to help ensure AI is implemented in a safe, trustworthy, and ethical manner, with principles and governance models for managing AI-related risks and challenges, including reputational, compliance, security, privacy, and even value risks, where insufficient resources, capabilities or technologies might diminish the value organizations can derive from their genAI solutions.
- **Shape the business operating model.** CIOs must engage with business leaders to define how AI can impact and transform their business processes and strategies.
- **Promote user adoption with change campaigns.** CIOs must enable adoption and usage tracking, implement a customer feedback loop, and partner with business teams to develop and deliver AI enablement training.
- **Prioritize investments and tracking ROI.** CIOs must collaborate with chief financial officers (CFOs) to ensure that investments in AI technology deliver measurable ROI, align with business outcomes, and embody the organization's values.



# Capturing value with genAI requires a human-centric approach

**It's said that you don't implement technology; you implement business outcomes. With genAI, those outcomes must be centered on improving user experiences, making work less tedious and more interesting to help spark innovation, and not just to make people more productive.**

According to our Q1 2024 KPMG genAI quarterly pulse survey, increasing productivity was third on the list of impacts companies expect from genAI in the next 12 months—after new business models and new product or revenue streams.<sup>2</sup> In other words, genAI is more about generating value than reducing costs. Value lies within people's brains; freeing up that value

2 Source: Gartner, "Gartner Annual Survey of CIOs and Technology Executives" (October 2023)

3 Source: "KPMG genAI Quarterly Pulse Survey: The path to sustainable returns," March 22, 2024

4 Source: Lee Rainie, et al., "AI in hiring and evaluating workers: What Americans think," Pew Research Center, April 20, 2023

is the goal of genAI. In fact, nearly half of executives responding to our quarterly pulse survey said that they were measuring ROI on their genAI investments through employee satisfaction.<sup>3</sup>

Employees, however, may have a different perspective. A Pew survey about Americans' views of AI use in the workplace revealed that 62 percent of Americans believe that AI will have a major impact on workers generally, but that only 13 percent believe it will help workers more than hurt them.<sup>4</sup> Nearly a quarter of workers believe their own jobs are at risk.<sup>5</sup> However, employers anticipate 23 percent of jobs to churn in five years.<sup>6</sup> And, 50 percent of those same employers expect net job growth versus 25 percent who anticipate losses.<sup>7</sup>

5 Source: "AI Generates Excitement and Fear as Employees Worry about Job Security," Qualtrics, June 2023

6 Source: World Economic Forum. "Future of Jobs Reporting 2023"

7 Ibid.



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## Capturing value with genAI requires a human-centric approach continued

Employees who are insecure about their continued employment display lower levels of performance, commitment, well-being and trust in the organization.<sup>8</sup> The result can be an organizational culture that forms a major barrier to any AI effort.

The key to unlocking value in any AI effort, therefore, is to take a human-centric approach, both to identify and prioritize places where it can be most effective and to avoid employee resistance. The opportunities are there. By one estimate, 80 percent of workers in the US economy have an occupation where more than 10 percent of tasks will be exposed to large language models (LLMs).<sup>9</sup>

We see several key steps CIO must take to adopt a human-centric approach:

- Estimate impact of genAI on key roles across your organization to prioritize opportunities
- Engage with knowledge workers to understand what drives time spent
- Analyze what portion of these tasks genAI can effectively augment today
- Supply tools and data, and build applications (if required) to free up time
- Drive adoption and scaling of what works; change behavior to re-invest time productively
- Perhaps most importantly, listen to employees and involve them throughout the entire process so that any genAI implementation is done with them and not to them.

It may be easier to quantify time savings than you might think. Using the latest research and benchmarks, KPMG Workforce.AI accelerators can estimate the potential time savings that genAI can unlock for key organizations by augmenting staff with genAI capabilities.

8 Source: "Understanding and Exploring the Concept of Fear, in the Work Context and Its Role in Improving Safety Performance and Reducing Well-Being in a Steady Job Insecurity Period," Diego Bellini et al., Sustainability Journal, 2022

9 Source: University of Pennsylvania, "An Early Look at the Labor Market Impact Potential of Large Language Models



# Co-creating with a CAIO

As of February 2024, one in ten companies have already named a chief AI officer (CAIO),<sup>10</sup> and almost half say they may do so soon.<sup>11</sup> With this individual now focused exclusively on AI, how will the CIO work with the CAIO if one is in place?

In many cases, we're seeing that the CAIO role is being filled by someone that's focused on business modeling. This role is typically more about shaping broad AI strategy and business-wide initiatives rather than what's required to enable those strategies from a technical perspective. Reporting

structures vary wildly, and it's not uncommon for the CAIO to report to or be aligned with the CIO.

If your organization has or is considering bringing on a CAIO, that person can become a key ally and valuable asset to the CIO as you work closely to divide and conquer. The magnitude of the challenge and the rapid pace at which AI is advancing demands all the skills and attention an organization can muster.

<sup>10</sup> Source: Fabio Moili and Til Roga, "The rise of the chief artificial intelligence officer," Spencer Stuart, February 2024

<sup>11</sup> Source: "KPMG GenAI Study: The path to sustainable returns," KPMG LLP, March 22, 2024

## How KPMG can help

At KPMG, we're embracing the power of AI to elevate the experiences of our clients and their people. We can help you think through your AI plan, then develop and launch it and guide you as you execute your program.

We help CIOs take charge of their AI efforts with solutions designed for all three pivotal roles. This includes aligning their efforts with leading practices and keeping you moving forward quickly with confidence and conviction. We can help you:

- Anticipate and adapt to the wide-ranging impacts AI can have on your organization, including budgets and financial controls, business processes and operating models, and employee growth and retention

- Understand your data—where it comes from, what controls are required, how to maximize value locked in it, and how to share that value across organizations
- Harness the power of AI ethically and responsibly with trusted AI principles and governance models for managing risk.



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